



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,611	09/29/2003	Rika Tanaka	00862.023251	8530

5514 7590 12/29/2006  
FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

AUGUSTINE, NICHOLAS

ART UNIT PAPER NUMBER

2179

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/671,611	<b>Applicant(s)</b> TANAKA ET AL.	
	<b>Examiner</b> Nicholas Augustine	<b>Art Unit</b> 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/29/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Overton (US 2003/0012409).

**As for independent claims 1-3 and 9-10**, Overton teaches a video combining method and corresponding apparatus, method and computer-readable medium for superimposing a virtual image generated by a computer on the real world observed by a user (figures 4-9 and 18; par.37, line 2), comprising the steps, means for, process, elements of: inputting an image obtained by image sensing the real world (par.40, line 8); inputting position and orientation information of the user's view point (fig.13 and

par.49, line 2); generating a virtual image based on said position and orientation information (fig.17-18 and par.49, line 24); extracting a virtual image elimination area of said virtual image (par.54, line 10); and combining said virtual image with said image obtained by image sensing based on said virtual image elimination area (par.60, line 39).

As for dependent claim 4, Overton teaches the video combining method according to claim 3, wherein at said designated area detection step, the area in the video image is detected from the video image obtained by image sensing (par.49, line 6).

As for dependent claim 5, Overton teaches the video combining method according to claim 4, wherein at said designated area detection step, a marker provided in area designation means operated by the user, included in the video image obtained by image sensing, is detected, and the area in the video image is detected based on the position of the marker (par.44, line 1; wherein the marker displayed for the video/image stream was provided by a person to act on being a marker in the image stream).

As for dependent claim 6, Overton teaches the video combining method according to claim 3, wherein at said designated area detection step, the area in the video image is detected based on position and orientation information of area designation means operated by the user (par.49, line 4; wherein the user is acting on operating the camera which feeds in the target area to be removed from the image stream/ video. This operation of the camera designates the position and orientation of the target area on the image stream as well as three-dimensional frame of reference of a site).

Art Unit: 2179

As for dependent claim 7, Overton teaches the video combining method according to claim 3, wherein at said designated area detection step, the area in the video image is detected based on information on an area surrounded with a particular color (par.44, line 1).

**Note:** Overton teaches how to solve the problem: to remove computer graphics from the real world to better suite the end users' experience so that real world objects of interest are not obstructed by computer graphics placed in the real world. Also Overton teaches in the same field of endeavor: images and video of real world having that of computer graphics placed in the real world to provide additional information/ data to the end user.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2179

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 8 is rejected under 35 U.S.C. 102(e) as anticipated by Overton (US 2003/0012409) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gerrissen et al (US 5,319,747).

As for dependent claim 8, Overton teaches the video combining method according to claim 3, wherein at said designated area detection step, the area in the video image is detected based on information on a closed area formed by the user's hand (par.44, line 1; wherein a reference image, representing a closed area for a virtual image to be displayed and extracted as real world objects obstruct the view, is placed in the real world by a users hands. It is well appreciated that a physical reference image could not be placed in a physical location without the interaction of a user(s)). Overton does not specifically mention the deletion of computer graphics with the user of hand gestures, but with reasonable understanding to one of ordinary skill in the art one could assume. However in the same problem sought to be solved and in the same field of endeavor Gerrissen teaches wherein at said designated area detection step, the area in the video image is detected based on information on a closed area formed by the user's hand (col.5, line 31; Of course, those skilled in the art will appreciate that the hand gestures of figures 3b, 3d, 3g, 3h could be replaced with the function of figure 3f). It would have been obvious to those skilled in the art to combine the tool functions using hand gestures in a 3D environment as taught by Gerrissen into the system

Art Unit: 2179

of a 3D model representation of editing 3D areas within a real world area of Overton. The motivation to combine is that one of editing computer graphics in a 3D environment for better suiting the users need (col.1, line 51).

*Note: the entire reference(s) should be taken in as a whole, applicant should fully read and understand the cited reference(s) in order to appropriately reply back to this office action. Ideas and motivation will not be fully understood with the lack of understanding from the reference(s) as a whole. Partial reading from specific column and line numbers will lead to a misunderstanding of principles and ideas since applicants can be there own lexicographer. Also the specific column and line numbers cited are to provide for a quick reference point in the mentioned reference(s) and not that of the only meaning and sole definition of a word, phrase, principle and/or idea expressed therein. The examiner has added extra explanation on a claim-to-claim basis for a better understanding of the principles and ideas from the author(s) of the cited reference(s). This explanation should not be taken for the exact and whole definition of principles and ideas taught by the author(s) of the cited reference(s).*

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-20040139156 Methods of providing direct technical support over networks

US-6084594 Image presentation apparatus

US-RE37668 Image encoding/decoding device

US-6850252 Intelligent electronic appliance system and method

US-6803928 Extended virtual table: an optical extension for table-like projection systems

US-6346929 Display apparatus which detects an observer body part motion in correspondence to a displayed element used to input operation instructions to start a process



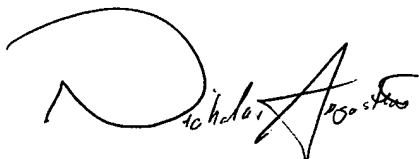
US-5790104 Multiple, moveable, customizable virtual  
pointing devices

***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Augustine whose telephone number is 571-270-1056. The examiner can normally be reached on Monday - Friday: 7:30- 5:00.

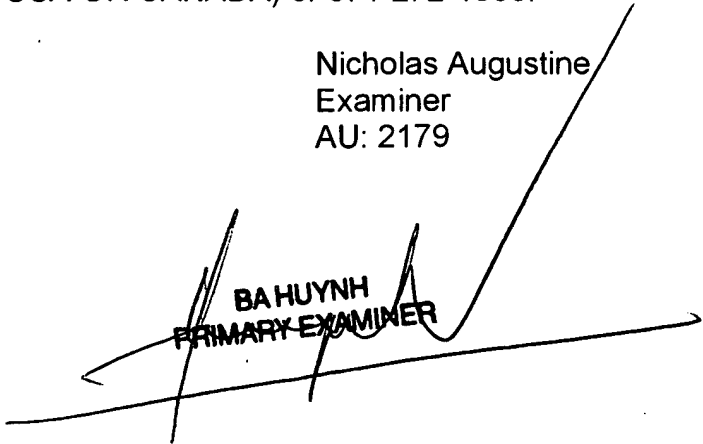
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



N. Augustine  
December 11, 2006

Nicholas Augustine  
Examiner  
AU: 2179



BA HUYNH  
PRIMARY EXAMINER